

## Eastern Great Basin Fire Behavior Forecast

Monday, August 25, 2003

Updated 8/24/03 @ 1600

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General weather outlook:

Red Flag Warnings/Fire Weather Watches – None

Area (Dispatch Zones)	Weather Synopsis
<b>Central/Southern Idaho and Bridger-Teton</b> ( <i>Boise, Central Idaho, Eastern Idaho, Payette, Sawtooth, Teton</i> )	<b>Weather:</b> Continued drying and warming trend.  <b>Max Temps:</b> 72-83 mountains, 84-94 valleys. <b>Min RH:</b> 10-18% valleys, 14-28% mountains. <b>Wind:</b> Southwest or upslope 5-15 mph. <b>LAL:</b> 1
<b>Northern Utah</b> ( <i>Salt Lake, Uinta, Uintah Basin</i> )	<b>Weather:</b> Mostly sunny north. Partly cloudy south. A chance of thundershowers, mainly mountains and south. Gusty winds near storms.  <b>Max Temps:</b> 71-81 mountains, 81-91 valleys. <b>Min RH:</b> 15-25% valleys, 20-38% mountains. <b>Wind:</b> North or upslope 5-10 mph. <b>LAL:</b> 1-2 north, 3-4 south.
<b>Southern Utah and Arizona Strip</b> ( <i>Richfield, Cedar City, Moab</i> )	<b>Weather:</b> Becoming mostly cloudy with scattered showers and thunderstorms, mainly over the mountains. Gusty winds near storms.  <b>Max Temps:</b> 72-84 higher elevations, 84-95 lower elevations <b>Min RH:</b> 22-45% higher elevations, 18-30% lower elevations. <b>Wind:</b> Upslope 5-15 mph. <b>LAL:</b> 2-4.
<b>Outlook for Tuesday through Thursday</b>	Increasing moisture Tuesday and Wednesday as a weak trough moves northeast across Great Basin. Dry cold front and chance of dry lightning central Idaho Tuesday night. Drying in the wake of the trough Wednesday and Thursday as flow turns westerly.

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## General Fire Behavior:

Northern Great Basin: The northern Great Basin areas of Idaho, northern Utah/Nevada, and the Bridger-Teton are drying quickly with humidity reaching the teens at some locations this afternoon. The 1000-hr fuels were not affected by the short-duration precipitation that occurred a couple of days ago. Normally for this time of year, 1000-hr fuels should be 10-12% in Central Idaho. Recent samples of 1000-hr fuel on the Payette measured 5%. . . . That is consistent with the NFDRS models that show central Idaho tracking close to historically low 1000-hr fuel moisture. Reports on fire behavior from the large fire incidents indicate that the 1000-hr fuels were burning through the day yesterday with some torching, short-range spotting, and short runs on some of the WFU incidents. Expect fire behavior to intensify tomorrow with the Fire Use incidents and Payette fires (N.Fork Lick & Richardson) gaining some acreage. Anticipate some torching, spotting, and short uphill runs. Holdovers that are detected the next couple of days may be more of a challenge to contain, as fine fuel moisture decreases. Moderate to High spread rates and intensity is anticipated.

Southern Great Basin: Higher relative humidity and precipitation has allowed fuels to recover to near normal levels. Low to moderate spread potential is anticipated in southern Nevada/Utah.

## \*\*\*\*\* Specific Fire Behavior:

Below are tables that illustrate a predicted representative fire behavior, based on predicted weather conditions at 1400 hrs:

FM 1,2,6 ➤ temp 90°F, RH 12%, and midflame wind at 8 mph on flat ground.

FM 10 (near 8000') ➤ temp 85°F, RH 20%, and midflame wind at 5 mph on flat ground.

Fuel Type	NFFL Fuel Model	Calculated Flame Length (ft)	Calculated Rate of Spread (ch/hr)
Short Grass	1	8	307
Timber w/ Grass Understory	2	12	129
Brush, dormant	6	10	84
Timber (litter & understory)	10	6	11

Probability of ignition 80-90%  
Spotting distance up to .3mi

*Obviously, higher rates of spread and flame lengths should be expected with the addition of slope or more wind, and the projections listed below are not meant as a substitute for site-specific calculations.*

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**Current observed fuel moistures in the Great Basin:**

1 hr. fine dead fuel moisture:	2-7%
1000 hr. dead fuel moisture	3-10%
Live Fuel Moistures: Sage	70-115%
Juniper	40-82%
Oak	110-120%
Conifers	80-100%

**Current 1000 hr and ERC charts for the Eastern Great Basin:**

(click on the link below)

[West Central Idaho](#)

[East Central Idaho](#)

[Upper Snake River](#)

[Northwest Utah](#)

[North Utah Mountains](#)

[Southeast Utah](#)

[Arizona Strip](#)

[Central Idaho](#)

[Lower Snake River](#)

[Bridger-Teton](#)

[Southwest Utah](#)

[Northeast Utah](#)

[South Central Utah](#)

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**Safety:**

***Situational Awareness and LCES will ensure firefighter safety at all times!***

**L = LOOKOUTS:** Lookouts must be experienced personnel who are well situated to see all parts of the fire.

**C = COMMUNICATIONS:** Communications must be clear and concise and maintained at all times between key personnel and all line firefighters.

**E = ESCAPE ROUTES:** Escape routes must be cleared of all obstructions and well known to all line firefighters.

**S = SAFETY ZONES:** Safety zones must be large enough to accommodate all personnel and equipment and well known to all line firefighters. Safety zones are not shelter deployment zones!